WHAT IS CLAIMED IS:

1.   A computer system to invoke multiple executions of an analytical task in response to receiving a request for analytical information from a front-end software application, wherein the computer system is programmed to:

use the request to identify a first input value;

invoke a first execution of the analytical task by providing the first input value to a first analytical engine;

identify a second input value; and

invoke a second execution of the analytical task by providing both the first and second input values to a second analytical engine.

2.   The computer system of claim 1, wherein the first analytical engine and the second analytical engine are located externally from the computer system.

3.   The computer system of claim 1, wherein the first analytical engine and the second analytical engine are the same analytical engine.

4.   The computer system of claim 1, wherein the request includes the first input value.

5.   The computer system of claim 1, wherein the request includes the second input value.

6.   The computer system of claim 1, wherein the computer system is programmed to obtain the first input value by invoking an execution of an additional analytical task.

7.   The computer system of claim 1, wherein the computer system is programmed to obtain the second input value by invoking an execution of an additional analytical task.

8.   The computer system of claim 1, wherein the computer system is programmed to obtain the second input value from an additional request that is received from the front-end software application.

9.   The computer system of claim 1, wherein the analytical task is a prediction task, and wherein the first and second analytical engines are prediction engines.

10.   The computer system of claim 9, wherein the computer system is programmed to use the request to identify the first and second prediction engines.

11.   The computer system of claim 10, wherein the computer system is programmed to:
    invoke the first execution of the prediction task on the first prediction engine by providing the first input value as input into a first data mining model; and
    invoke the second execution of the prediction task on the second prediction engine by providing both the first and second input values as input into a second data mining model.

12.   The computer system of claim 11, wherein the first and second data mining models are a common data mining model, and wherein the first and second data mining models are used by the first and second prediction engines during task execution.

13.   The computer system of claim 1, wherein the computer system is programmed to automatically send output information generated from the first execution of the analytical task back to the front-end software application.

14.   The computer system of claim 1, wherein the computer system is programmed to automatically send output information generated from the second execution of the analytical task back to the front-end software application.

15.   A computer-implemented method for invoking multiple executions of an analytical task in response to receiving a request for analytical information from a front-end software application, the method comprising:

using the request to identify a first input value;

invoking a first execution of the analytical task by providing the first input value to a first analytical engine;

identifying a second input value; and

5   invoking a second execution of the analytical task by providing both the first and second input values to a second analytical engine.

16.   A computer-implemented method on a front-end software application, the method comprising:

10   sending a request to execute an analytical task;

receiving output information generated from a first execution of the analytical task in response to the request;

if the output information does not satisfy a predetermined criterion, waiting to receive additional output information generated from a second execution of the analytical task in

15   response to the request.

17.   The computer-implemented method of claim 16, wherein the method comprises receiving output information generated from the second execution of the analytical task.

20   18.   The computer-implemented method of claim 16, wherein sending the request to execute an analytical task includes:

sending a first input value used for execution of the analytical task; and

sending a second input value used for execution of the analytical task.

25   19.   The computer-implemented method of claim 18, wherein:

sending the first input value used for execution of the analytical task includes sending the first input value at a first point in time; and

sending the second input value used for execution of the analytical task includes sending the second input value at a second point in time.

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20.   The computer-implemented method of claim 18, wherein:

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sending the first input value used for execution of the analytical task includes sending the first input value used for the first execution of the analytical task; and

sending the second input value used for execution of the analytical task includes sending the second input value used for the second execution of the analytical task.

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21.   The computer-implemented method of claim 16, wherein the method comprises processing the output information generated from the first execution of the analytical task if the output information does satisfy a predetermined criterion.

10   22.   The computer-implemented method of claim 16, wherein the predetermined criterion includes a quality-rating criterion.

23.   The computer-implemented method of claim 16, wherein the predetermined criterion includes a confidence-rating criterion.

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24.   The computer-implemented method of claim 16, wherein the analytical task in a prediction task.

25.   A computer-readable medium having computer-executable instructions contained
20   therein for performing a method, the method comprising:

using the request to identify a first input value;

invoking a first execution of the analytical task by providing the first input value to a first analytical engine;

identifying a second input value; and

25   invoking a second execution of the analytical task by providing both the first and second input values to a second analytical engine.

26.   A computer-readable medium having computer-executable instructions contained therein for performing a method, the method comprising:

30   sending a request to execute an analytical task;

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receiving output information generated from a first execution of the analytical task in response to the request;

if the output information does not satisfy a predetermined criterion, waiting to receive additional output information generated from a second execution of the analytical task in

5   response to the request.